

## **REMARKS**

After entry of the instant Amendment, claims 2-16, 18-23, 35-37, 39, and 40 remain in the application with claims 16, 21, and 36 in independent form. More specifically, in this Amendment, claims 2-15, 18-20, and 35 have been amended to depend from claim 36, which is an article claim, and have further been amended to claim an article instead of a material composition. Claim 16 has been amended into independent form to incorporate each element from independent claim 1 and dependent claim 15 (from which claim 16 previously depended), and claim 16 has been further amended to replace the acronyms “PGMEA” and “PGMA” with the proper chemical names “propylene glycol monomethyl ether acetate” and “propylene glycol monomethyl ether”, as readily appreciated by those of skill in the art. Claim 21 has been amended into independent form to include each element from independent claim 1 (from which claim 21 previously depended) and has further been amended to affirmatively claim the step of imprinting a material composition, support for which can at least be found in the second full paragraph on page 4 of the original application as filed. Likewise, claims 22 and 23 have also been amended to further define the step of imprinting as set forth in claim 21. Claim 36 has been amended into independent form to incorporate each element from claim 1 (from which claim 36 previously depended) and to further incorporate each element of dependent claim 38 (which was indicated as allowable). Claim 39 is currently amended to depend directly from claim 36, instead of from claim 38. Claims 1, 24, and 38 are presently cancelled. Claims 17, 25-34, and 41-50 were previously cancelled. No new matter is added through the instant Amendment.

The Applicants note that the preambles of claims 2-15, 18-20, and 35 have been changed from originally claiming a “material composition” to “an article”. The Applicants respectfully submit that such amendments are proper in view of the fact that claims 2-15, 18-20, and 35 now depend from claim 36, which is a claim to an article. Notably, claim 36 specifically referenced the material composition of claim 1. Because claim 36 is currently amended to incorporate the elements of claim 1 to specifically define the material therein, the Applicants respectfully submit that the amendment of dependent claims 2-15, 18-20, and 35 to make them article claims is proper, especially due to the prior relationship between claim 1 and claim 36.

Claims 21-23 stand rejected under 35 U.S.C. §101 as being drawn to non-statutory subject matter. Claim 16 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 1-13, 15, 18, 24, and 35-37 stand rejected under 35 U.S.C. §102(e) as being anticipated by Dhal et al. (U.S. Pre-Grant Pub. No. 2003/0157414). Claims 14, 19, and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Dhal et al. Claims 38-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten into independent form. Because claim 36 has been amended to incorporate the elements of independent claim 1 and allowed claim 38 (which previously depended from claim 36), the Applicants respectfully submit that claim 36 is in condition for allowance. Further, in view of the amendment of claims 2-15, 18-20, and 35 to depend from claim 36, the Applicants respectfully submit that those claims

are also in condition for allowance. Further still, in view of the amendments to claim 16 and 21-23 for purposes of overcoming indefiniteness rejections (for purposes of claim 16), or non-statutory subject matter rejections (for purposes of claims 21-23), the Applicants respectfully submit that the rejections of claims 16 and 21-23 have been overcome such that those claims are also in condition for allowance.

The Applicants note that claims 16 and 21-23 were not previously subject to any rejections over the prior art, and that these claims are both novel and non-obvious over the prior art (including Dhal et al.). To explain, original claim 16 specified a specific group of non-reactive diluents that are not taught by Dhal et al. While the Examiner cited a silicone fluid that is disclosed by Dhal et al. as satisfying the generically-claimed non-reactive diluent of claim 15, silicone oils are substantially different than the specific organic compounds claimed in claim 16. As such, the Applicants respectfully submit that independent claim 16 is non-obvious over Dhal et al. and is in condition for allowance.

With regard to claims 21-23, the Applicants respectfully submit that Dhal et al. fails to teach any step of imprinting the material composition disclosed therein. To explain, Dhal et al. is not directed to nanopatterning or lithography techniques, but is rather directed to creating of refractive index modulation in the material composition through selective polymerization of monomer present in the composition (see paragraph [0005] in the Background of Dhal et al., which provides a detailed explanation for how regions of different refractive indices are formed in holographic recording mediums). Importantly, after creating the refractive index modulation, the material composition is subject to post-imaging blanket exposure to actinic

radiation to complete polymerization of the monomer and fix the hologram. Clearly, there is step of imprinting occurring in the processes disclosed by Dhal et al., and none of the techniques claimed in independent claim 21 are taught by Dhal et al. In fact, the processes taught by Dhal et al. rely upon principles of diffusion for formation of holographic images in the medium disclosed therein, which clearly does not involve imprinting of the medium. As such, the Applicants respectfully submit that claims 21-23 are also non-obvious over the teachings of Dhal et al. such that claims 21-23 are also in condition for allowance.

In view of the foregoing, the Applicants respectfully submit that all claims pending in the instant application are in condition for allowance, which allowance is respectfully requested. Because the due date for filing the instant Amendment without payment for an extension of time expired on Saturday, September 19, the Applicants respectfully submit that this Amendment is timely filed such that no fees for extensions of time are presently due. It is further believed that no other fees are presently due. However, the Commissioner is authorized to charge our deposit account no. 08-2789 for any additional fees or credit the account for any overpayment.

Respectfully submitted,

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